Australian Government

MEA230 Test and troubleshoot fixed wing aircraft automatic flight control systems and components

Release: 2

MEA230 Test and troubleshoot fixed wing aircraft automatic flight control systems and components

Modification History

Release 2. Equivalent to MEA230 Test and troubleshoot fixed wing aircraft automatic flight control systems and components with amended prerequisite name.

Application

This unit of competency requires application of hand skills and the use of system/component knowledge and applicable maintenance publications to test and troubleshoot aircraft automatic flight control systems and components of fixed wing aircraft that have automatic flight control systems during scheduled or unscheduled maintenance. Work may be performed individually or as part of a team.

The unit of competency is part of the Avionic Certificate IV (Aircraft Maintenance Stream) training pathways and is an alternative unit to MEA231 Inspect, test and troubleshoot rotary wing aircraft automatic flight control systems and components.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Australian Defence Force (ADF) and the Civil Aviation safety Authority (CASA).

Where a CASA licensing outcome is sought this unit forms part of the CASA requirement for the granting of the chosen maintenance certification licence under Civil Aviation Safety Regulation (CASR) Part 66, in accordance with the licensing provisions in the Companion Volume Implementation Guide.

Pre-requisite Unit

MEA225	Inspect fixed wing aircraft automatic flight control systems and components
MEA246	Fabricate and/or repair aircraft electrical hardware or parts

Competency Field

Aviation maintenance

Unit Sector

Elements and Performance Criteria

Elements describe the	Performance criteria describe the performance needed to

essential outcomes.	demonstrate achievement of the element.
1. Prepare for troubleshooting	1.1 Relevant maintenance documentation and modification status, including system defect reports, where relevant, are used to identify an unserviceability
2. Test/adjust automatic flight control system	2.1 Aircraft and system are prepared in accordance with applicable maintenance manual for the application of power/system operation
	2.2 Automatic flight control system is functionally tested in accordance with maintenance manual for evidence of serviceability or malfunction while observing all relevant work health and safety (WHS) requirements
	2.3 System calibration or adjustments are performed in accordance with maintenance manual, as appropriate
3. Troubleshoot automatic flight control system	3.1 Available information from maintenance documents and inspection and test results is used, where necessary, to assist in fault determination
	3.2 Maintenance manual fault diagnosis guides and logic processes are used to ensure efficient and accurate troubleshooting to line replacement level
	3.3 Specialist advice is obtained, where required, to assist with the troubleshooting process
	3.4 Automatic flight control system faults are located and the causes of the faults are clearly identified and correctly recorded in maintenance documentation, where required
	3.5 Rectification requirements are determined

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional

contexts) are included.

Automatic flight control systems include:	• Automatic pilot • Flight director • Automatic trim • Yaw damper • Automatic throttle and automatic landing (where applicable to the enterprise)
Procedures and requirements include:	• Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

Release 2. Equivalent to MEA230 Test and troubleshoot fixed wing aircraft automatic flight control systems and components.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371